Application No. 10/626,382 Amendment Dated 20 October 2005 Reply to Office Action of 27 May 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method for determination of sharpness of a chopping unit including a chopping drum mounted for rotation in a bearing and carrying chopping blades which work against a counterblade mounted to a support, especially for the determination of the change in state of sharpness of the chopping blade between at least two points in time, comprising A forage harvester with a chopping drum rotating about an axis and carrying a plurality of chopping blades, the forage harvester having means for feeding crop material across a counterblade mounted on a counterblade support and cooperating with the chopping blades to define a cutting gap and to cut the crop material into relatively short lengths as it passes across the gap, a sensor mounted at a protected location on one of the bottom of the counterblade and the rear of the counterblade and the counterblade support, the sensor operable to measure a parameter of oscillation of the counterblade, the sensor connected to a processing device which is operable to perform the steps of:
 - making at least two measurements of <u>the</u> a characteristic parameter of an operating oscillation induced in one of said chopping blade and counterblade;
 - b. <u>comparing integrals</u> determining a ratio of fractions of said <u>parameter</u>
 <u>of</u> oscillation at least two frequency bands of the measured signal or its
 <u>maximum value</u> peak for each of said two measurements, and;
 - c. evaluating a change in said ratio between said two measurements.
- 2. (Currently Amended) The method A forage harvester, as defined in claim 1, wherein:
 - a first of said at least two measurements is made when said chopping blades are sharp and is followed by an analysis of the fractions of at least two frequency regions of the measured signal;
 - b. a second <u>of</u> said <u>at least</u> two measurements is made after a preselected interval determined by one of duration or revolutions of the chopping drum, that is greater than or equal to zero, and measurement

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- analysis of the fractions of the same frequency regions as are in step (2a) of said measurement signal; and
- c. determining a reference value from analysis of said results of steps (2a) and (2b) by one of, forming a difference or a quotient, or by using a weighting function on the second measurement, recovered from the first measurement;
- d. comparing said reference value determined in step (2c) with a selectable stipulated threshold value of deviation, with a return to step (2b) when this stipulated threshold value of deviation is fallen short of; and
- e. triggering an event responsive to the comparison made in step (2d) when the stipulated threshold value of deviation is equaled or exceeded.
- 3. (Currently Amended) The method A forage harvester as defined in claim 1 wherein said an analysis of said characteristic parameter of oscillation according to steps 1a through 1c occurs in the time or frequency region.
- 4. (Currently Amended) The method A forage harvester as defined in claim 1 wherein said characteristic parameter of oscillation is an acceleration, an elongation or an acoustic pressure.
- 5. (Cancelled)